

**WRITTEN STATEMENT OF**  
**Nicole Vesely**  
**Safe Kids Wisconsin**  
**ON**  
**SB 415 AND THE EFFECTS CARBON MONOXIDE ON CHILDREN**

Good morning Chairwoman Taylor and members of the Senate Committee. My name is Nicole Vesely, and I am here today representing Safe Kids Wisconsin, a member of Safe Kids USA. I thank you Chairwoman Taylor for holding this public hearing and to Senator Hansen and Representative Hintz for introducing this important legislation to require that certain one- and two-family residential dwellings be equipped with working carbon monoxide (CO) alarms.

As a representative of Safe Kids Wisconsin, I wholeheartedly support the passage of SB 415. Other members of the Safe Kids Wisconsin coalition network also support this life-saving legislation. The enactment of this legislation will go a long way toward ensuring the health and safety of Wisconsin's children and families.

As you may know, carbon monoxide – a colorless, odorless gas – is responsible for more than 500 unintentional deaths and approximately 20,000 emergency department visits each year in the United States. According to the Centers for Disease Control and Prevention, from 1999-2004, 135 children ages 14 and under died from unintentional, non-fire related CO poisoning. However, because symptoms of CO poisoning are similar to the flu and other common ailments, it is possible that many deaths have not been classified as CO poisoning and as a result, the number of fatalities could be much higher than reported. CO is produced when any fuel is incompletely burned – potentially resulting in flu-like illnesses, such as dizziness, fatigue, headaches, nausea, and irregular breathing. Common fuel-burning appliances, like furnaces, stoves, fireplaces, clothes dryers, water heaters, and space heaters can produce lethal amounts of CO under certain conditions.

Young children are especially vulnerable to the effects of CO. They are more susceptible to carbon monoxide and may experience symptoms sooner than a healthy adult. Due to their smaller bodies, children process CO differently than adults and may be more severely affected by carbon monoxide in their blood. Regardless of who is affected by CO, the treatment for CO is the same – oxygen therapy to treat symptoms and to lower carbon monoxide levels in the blood or the use of a full-body hyperbaric chamber that applies air pressure to remove the carbon monoxide faster. For those who survive a carbon monoxide poisoning, the long-term effects can be severe. Victims have reported memory loss, impaired motor skills and heart and lung problems. Often times, they deal with the CO injury for the rest of their lives.

The frustrating thing about CO poisonings is that they can be prevented. **The single most effective safety device available to reduce injuries and fatalities related to carbon monoxide poisonings is a carbon monoxide alarm.** A CO alarm in the home can give families a sufficient warning when concentrations of carbon monoxide reach dangerous levels. It is estimated that CO alarms may prevent half of such related deaths from occurring. In fact, the U.S. Consumer Product Safety Commission (CPSC), one of the government agencies charged with protecting

the health and safety of American consumers, recommends that every home have a working CO alarm. Furthermore, the CPSC believes that CO alarms are "as important to home safety as smoke [alarms]."

Though we know that CO alarms are effective when installed properly, we also know that many families do not have this vital safety device in their homes. A law, such as SB 415, would send the important public health message that CO alarms are needed in residences to reduce the risk of CO poisoning for the entire family. In fact, studies show a dramatic correlation between CO alarm ordinances in cities and lower death rates from CO. In Los Angeles, where CO alarms are not mandatory, 15 percent of CO exposures were fatal. Compare this to Chicago, where CO alarms are required and 0.4 percent of people exposed to carbon monoxide died. Currently, 24 states have residential state CO laws and as a member of the public health community, I strongly urge the Senate Committee on Judiciary, Corrections, Insurance, Campaign Finance Reform and Housing to help ensure that Wisconsin joins this roster. Thank you.



# Wisconsin State Fire Chiefs' Association, Inc.

Together We Can Make A Difference

- Education
- Prevention
- Safety
- Suppression
- EMS

DATE: January 12, 2010

TO: Senate Committee on Judiciary, Corrections, Insurance, Campaign Finance Reform and Housing

FROM: Wisconsin State Fire Chiefs' Association

RE: Support Senate Bill 415

The Wisconsin State Fire Chiefs' Association asks that you support Senate Bill 415. SB 415 will provide protection for all occupants of residential buildings in the State of Wisconsin from accidental carbon monoxide poisoning.

Carbon monoxide is an invisible, odorless gas produced when carbon-based fuels like wood, oil, coal, kerosene and natural gas burn incompletely. Exposure to increasing levels of carbon monoxide can lead to headaches, nausea, dizziness, fatigue, shortness of breath, unconsciousness and death. CO detectors are the only way to detect dangerous levels of the gas. The fire service in Wisconsin responds to many carbon monoxide alarms each year. The detector has sounded in these buildings notifying the occupants of carbon monoxide levels beginning to build to a dangerous level. When a malfunctioning fuel burning appliance is discovered by the installation of carbon monoxide detector the building occupants lives are spared from illness or even death.

The most recent statistics that are available from the CDC (1999 – 2004) shows that the State of Wisconsin ranks 12th in the United States with unintentional, non-fire related deaths from carbon monoxide (CO) poisoning. In the United States, as many as 5,000 to 6,000 people die annually as a result of CO poisoning. I have attached an informational flyer on carbon monoxide gas and detectors for your use.

The Wisconsin State Fire Chiefs' Association would like to thank you for the consideration that the Committee has given SB 415 and we urge you to consider voting in favor of this important legislation to provide a safe living environment for our residents. If you have any questions please contact David Bloom, Legislative Liaison, Wisconsin State Fire Chiefs' Association at 608-444-3324.

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## Other Sources for Information on Carbon Monoxide

National Fire Protection Agency  
Center for Disease Control  
Local Emergency Management  
Local Fire Department

### Websites Information

[www.coheadquarters.com/CO1.htm](http://www.coheadquarters.com/CO1.htm)

<http://commerce.wi.gov/SBdoes/SB-UDCCCommentary23.pdf> (HVAC code)

[www.carbon-monoxide-poisoning.com/](http://www.carbon-monoxide-poisoning.com/)

### Detectors & Services

[www.smokesign.com/codetectors.html](http://www.smokesign.com/codetectors.html)

[www.homeinspections-](http://www.homeinspections-usa.com/carbon.php)

[usa.com/carbon.php](http://usa.com/carbon.php)

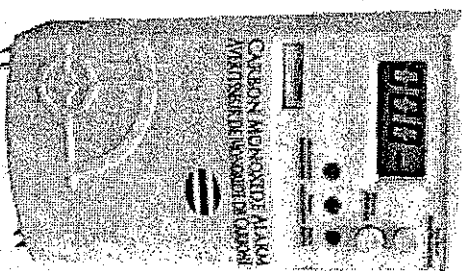


## Carbon Monoxide Education

What is Carbon Monoxide and  
what you need to know to get  
out alive!!

This document was produced for  
you by:

*Jamie K. Bowes*  
Fire Fighter/Paramedic  
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Department



## **What is Carbon Monoxide?**

Carbon Monoxide is a colorless, odorless & tasteless gas. It's produced by incomplete combustion (and normal combustion) of some fuels. Carbon Monoxide is commonly referred to as CO, shorthand for it's chemical components. Carbon Monoxide is also known as a "Silent Killer" because of it being practically undetectable to human senses.

## **Where does CO come from?**

Some common sources are vehicles running in garages for lengthy times, malfunctioning chimneys (or clogged,) malfunctioning furnaces or gas appliances. The danger of CO asphyxiation goes up in the winter because homes tend to be shut up and sealed from the cold weather more.

## **How is CO dangerous?**

CO has a 200% higher affinity (attraction) to the hemoglobin on red blood cells than oxygen. That means that your body would rather have CO than oxygen when given the choice. The result is that body cells start

dying. CO can harm in very small quantities. According to the CDC about 500 Americans/year die as a result of accidental CO asphyxiation. About 2,000 Americans/year die as a result of suicide by CO asphyxiation.

- 25-40% of accidental deaths died from acute exposure.
- 15-40% of survivors suffered immediate or delayed neuropsychological deficit.

## **How do I know if CO is affecting me?**

The best detection of carbon monoxide is by a detector. Carbon monoxide detectors are readily available and affordable. Other signs and symptoms of CO poisoning include: nausea, vomiting, dizziness, lightheadedness, severe headaches & sleepiness. More severe symptoms are unconsciousness, permanent brain damage or death.

## **What do I do if there's a CO problem?**

If you don't know for sure, Call 911!! Get every one out of the house and to fresh air. Short-term exposure

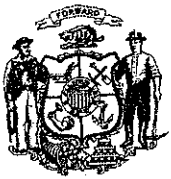
to low amounts of CO will not permanently damage the body. Re-entering a building with high CO concentrations can cause permanent damage very quickly. Ventilating the space will dissipate the CO, but it will not stop the problem. Whatever the source is, it needs to be fixed by a professional.

## **What can I do to Prevent CO problems?**

Most CO problems are from malfunctioning gas appliances. Proper installation, maintenance and operation of these appliances are an important step to keep safe. Don't leave your car running in the garage. Get a carbon monoxide detector!! In the state of Wisconsin right now it is not required that a land-lord supply a tenant with a CO detector, so there most likely is not one!

## **Where do I put my CO detector?**

Follow the manufacturer's guidelines for installation of the detector. Many sources suggest having one near the sleeping area in a home, one on each level and one within six feet of each sleeping area.



## **SB 415 – Carbon Monoxide Legislation**

**TESTIMONY 1/12/10**

**Senate Judiciary, Corrections, Insurance, Campaign Finance Reform and Housing**

I co-authored this legislation with Senator Hansen after it was brought to my attention that there is a gap in our law requiring carbon monoxide detectors in residences in Wisconsin.

Last session, the Legislature passed and Gov. Doyle signed into law Act 205, requiring carbon monoxide (CO) alarms in all multi-family homes, hotels, bed and breakfast establishments, or any public building that is used for sleeping or lodging purposes. As Senator Hansen explained this bill simply expands current law to require CO alarms in *all* one- and two-family homes and parallels requirements for smoke alarms for ease of installation

### **Recent Carbon Monoxide Poisoning in Milwaukee:**

Carbon Monoxide is dubbed the “silent killer” because it *cannot* be detected by human senses. Incidents of carbon monoxide poisoning are all too common, especially during the winter time and in older homes. Recently, on January 4<sup>th</sup>, the Milwaukee Fire Department responded to an apartment building when a carbon monoxide detector went off. An exhaust pipe in the basement had become detached causing the carbon monoxide levels in the building to rise to dangerous levels. One evacuated resident was sent to the hospital for treatment. This scenario could have been much, much worse if the building did not have a carbon monoxide detector.

This is illustrated by recent tragic deaths of a family of three in Quebec on December 30th. The family died in their sleep and the cause of death was determined to be carbon monoxide that had built up due to improper ventilation of an emergency generator used during a power outage. The home did not have a carbon monoxide detector.

Here in Wisconsin we are exceptionally susceptible to carbon monoxide issues due to our cold climate. Many people around the state have older homes with older furnaces *or* may have back up generators in case of power outages, both of which place people at a higher risk.

Last Wednesday in the Assembly, the Consumer Protection Committee held a public hearing on the companion bill, AB 607, last week. We heard from individuals that had suffered from carbon monoxide poisoning just how quickly a person can become overcome when exposed. We also heard from those that were spared from adverse affects because their carbon monoxide alarms had alerted them and allowed them to get their families out in time. The testimony was powerful and it was frightening how a simple thing such as an improperly vented furnace or the corrosion of a small piece of metal on an old one can lead to an immediately life threatening scenario.

Carbon monoxide alarms cost as little as \$17. This is a small expense given the potentially life-saving measure the installation of such a device is.

With your support of this legislation, we can ensure that every residence in the state of Wisconsin is safe from the lurking danger carbon monoxide presents.

**Testimony on Carbon Monoxide Detector Bill, Senate Bill 415**  
**Senate Committee on Judiciary, Corrections, Insurance, Campaign Finance Reform and**  
**Housing**  
**January 12, 2010**

Please accept these comments regarding Senate Bill 415. There are several concerns because of possible ambiguities in the language and in the way the bill would be administered.

- I am concerned the language may favor one public manufacturer over another. Let the Department of Commerce determine which products meet safety standards. The statutes should be neutral.
- Under the bill, the owner of a dwelling must install the detector according to the directions and specifications of the manufacturer.
- There have been problems with some manufacturers. Let me give you four examples:
  - 1) I returned 4 Kidde CO detectors for failure to function or set correctly. Could not get satisfaction from Kidde. If product supply is limited due to statutory language, what is a consumer to do?
  - 2) Another Association chapter says its fire department says Kidde is not reliable. Does this bill require that a product be used, even if a local fire department says not to use it?
  - 3) I received an e-mail regarding a training class put on by the City of Madison Fire Department. In this class, information was presented by Kidde and First Alert. Each had different instructions for the installation.
  - 4) The bill requires placement of the CO detectors in the basement. Other directions indicate they should be no closer than 20 feet from a furnace or not be put in a dusty basement. State rules for multi-family dwelling units say something else. The Fire Dept used a PowerPoint that showed drawings of placement for the CO detectors but neither one had any in the basement. I have sent this to my local Fire Department asking clarification, and they sent it back to the Commerce Department for answers.

We support the general thrust of the proposed legislation. We worry parts of this bill will lead to confusion and should be addressed before adding more procedures to the present rules. We hope the authors will address our concerns and make it a better bill.

Thank you.

Dale Hicks

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